[redacted]

403222

Monthly Report to the General Advisory Committee

US DOE ARCHIVES
RG 326 U.S. ATOMIC ENERGY COMMISSION
Collection SECRETARIAT
Box 1392
Folder OTMTGAC Monthly Report

MARCH 1951

UNITED STATES ATOMIC ENERGY COMMISSION

WASHINGTON D.C.

[redacted]

DELETE THIS PAGE ONLY
CLASSIFICATION CANCELLED
WITH DELETIONS ON PP 84-97 *
BY AUTHORITY OF DOE/OC
REVIEWED BY [redacted] DATE: 11/15/96

* Pages I-3 Thru I-32
AND
III-51 Thru III-59 ONLY

[redacted] 84

FB

[redacted]

MONTHLY REPORT TO THE
GENERAL ADVISORY COMMITTEE

MARCH 1964

CONTENTS

DOD ARCHIVES

[redacted]

85
~~76~~

BIOLOGY AND MEDICINE - MARCH 1964

Medical Survey of the Rongelap People

In March 1964, a combined Atomic Energy Commission and Trust Territory medical team carried out the annual survey of the people of Rongelap Island, 10 years after their accidental exposure to fallout radiation. Dr. T. Kumatori of the National Institute of Radiological Sciences, Chiba, Japan, who is in charge of the annual medical examinations of the Lucky Dragon fishermen involved in the same accident as the Marshallese, visited Rongelap for the survey. Dr. Robert Conard of Brookhaven National Laboratory, N.Y., who heads the AEC medical team, had visited Dr. Kumatori in Japan for examination of the exposed Japanese Fishermen prior to the Rongelap survey.

The following statement concerning the results of the survey at Rongelap must be considered as preliminary in nature since most of the data collected have yet to be analyzed:

DOE ARCHIVES

> "During the past year, the people have been well with no major disease epidemics. The poliomyelitis epidemic which occurred during the 1963 survey has been controlled with no further spread of the disease. The usual number of cases of upper respiratory infections and gastroenteritis were reported. A 108 year old exposed woman died, presumably from senility. The usual number of normal births in both exposed and unexposed groups were noted."

The examinations of the people revealed that they were generally in good health with no apparent nutritional deficiencies. No evidence of cancer or leukemia was detected. Slight retardation of growth and development was again noted in some of the exposed children, particularly boys who were exposed at less than six years of age. Thyroid nodules found in three exposed girls are being further evaluated. There were no illnesses that could be directly related to radiation exposure. Healed fallout burns of the skin, present in a number of people, showed no sign of ulceration or malignancy, although pigmented changes such as nevus-like moles were noted. Analysis of blood counts must be awaited to see if the slight depression of blood counts previously noted still persists. Measurements of body burden of internally deposited radioisotopes will be estimated from urine samples obtained from the people. It is planned to take equipment to Rongelap in 1965 to make direct body measurement of

internally deposited radioisotopes.

DOE ARCHIVES

Examinations of the Rongelap people and the Japanese fishermen exposed to fallout showed that the effects of exposure were similar in both groups and that the doses of radiation received by the Rongelap people were generally about the same as received by the fishermen. Similar types of fallout burns of the skin were observed.

DOE ARCHIVES

DOE ARCHIVES

EXTRANEOUS MATERIAL DELETED

EXTRANEOUS MATERIAL DELETED

DOE ARCHIVES

DOE ARCHIVES

DOE ARCHIVES

EXTRANEOUS MATERIAL DELETED

EXTRANEOUS MATERIAL DELETED

DOE ARCHIVES

91

TEST OPERATIONS

Underground Test Series - NIBLICK - NTS

March Operations

DELETED

DOE ARCHIVES

(2) PIKE, a Los Alamos Scientific Laboratory experiment with a [redacted] was detonated at 11:02 EST at the Nevada Test Site on March 13, 1964. PIKE was [redacted] underground experiment at the Nevada Test Site since the signing of the limited test ban treaty. The present best estimate of the PIKE yield was [redacted] The depth of burial of the device was 384 feet which is conservative for this yield; normal burial depth in this area to insure containment [redacted] between 350 and 370 feet.

[redacted]

92
93

DELETED

At ten to fifteen seconds after shot time, a dense black cloud began issuing from the ground zero area. This black effluent continued to spew out of the ground for about fifty seconds until the underground cavity collapsed. At H plus 2 minutes, the maximum telemetry reading at 300 feet from ground zero was greater than 1,000 roentgens per hour with a representative decline occurring down to a reading of 0.50 r/hr at H plus 28 hours.

Following the initial release, the radioactive air mass rose to about 10,500 feet mean sea level (MSL) and moved to the southeast toward Cactus Springs and Indian Springs, Nev. The highest recorded reading at any populated off-site locality was Cactus Springs, Nev. (about 34 miles from ground zero) where ground monitors recorded 6.0 milliroentgens per hour at about two hours after the detonation. The radiation levels essentially returned to background values the following day.

DOE ARCHIVES

Late on March 13, the leading edge of this radioactive air mass was about 25 miles east of Needles, Calif., and extended to the west about 50 miles. Activity was detectable only between 7,000 and 10,000 feet MSL and no activity was detected below 4,000 feet MSL. Near Blythe, Calif., the radioactive air mass started to break up into small pockets. From that point south toward Yuma, Ariz., the cloud was discontinuous and pockets were detected only at altitudes between 2,000 and 7,000 MSL. From Saturday (March 14) afternoon on, all tracking aircraft reported information to the effect that the radioactive air mass had dispersed to the point of being no longer detectable. Subsequently, the Air Force concentrated its efforts on checking air masses coming out of Mexico to determine the existence of radioactive debris with negative results.

The re-entry team, on Monday, March 16, 1964, observed a crack in the solid ground approximately 30 feet north-northeast of the rim of the crater (130 feet from ground zero) and estimated this crack to be approximately eight or ten feet in length (at the surface) with a gas eroded, highly radioactive hole approximately four inches in diameter near the north end of the crack.

The conclusions reached after an extensive investigation were as follows:

a. The most probable cause of the venting was an apparent local weakness of the alluvium which cracked under the ground shock from PIKE and thus permitted the escape of the debris.

b. As of March 22, 1964, (nine days after the detonation) there was no evidence that a health hazard had been created. On the basis of current evidence, none is expected to develop.

DOE ARCHIVES

c. The elaborate network of stations supported by airborne sampling equipment, all designed to completely document inadvertent ventings, has to date functioned as planned. There is no positive evidence that debris crossed the border in measurable and identifiable amounts. If trace amounts did cross the border, they were not measurable by normal aerial surveys since measured radiation levels in Ariz. were almost at background values, as determined by the extremely sensitive instruments in the AEC monitoring aircraft.

TEST PLANNING

Underground Test Series - NIBLICK - NTS

NIBLICK IV (April - June 1964)

A tentative schedule of events for April is as follows:

Military Application [redacted]

Nickname (Sponsor)	Device	Expected Yield (KT)
HOOK (LRL) 1/		
STURGEON (LASL) 2/		

DELETED DELETED DELETED

1/ Conducted on April 14 with yield about as expected.
2/ Conducted on April 15 with yield about as expected.

DOE ARCHIVES

Pahute Mesa Airstrip Authorized

The Nevada Operations Office has been authorized to proceed with the design and construction of an airstrip at Pahute Mesa. It is to be a 5,800-foot strip, 100 feet wide, and designed for a DC-3 capability. A minimum taxiway and parking apron is also authorized, but no buildings or utilities are currently authorized. NV is to do the planning and construction on an austere basis while still meeting safety requirements.

EXTRANEOUS MATERIAL DELETED

[redacted]

95

EXTRANEOUS MATERIAL DELETED

Designation of FY 1965 Underground Test Series

The test series planned for FY 1965 (July 1, 1964 through June 30, 1965) has been designated as Operation WHETSTONE. The name is [redacted] and the meaning is [redacted] until released publicly.

Atmospheric Test Readiness Capability

Diagnostic Aircraft

The previously reported delivery date (late June 1964) of the C-135 diagnostic aircraft to LRL has slipped to early August. The delay is occasioned by complexities of installing a large optical glass door in the fuselage. At the present time, it appears that the LRL aircraft may not be available for the planned continental United States test runs scheduled for early July. However, full participation by the LRL aircraft is anticipated for the planned October test run exercise in the Hawaiian area.

DOE ARCHIVES

EXTRANEOUS MATERIAL DELETED

2/21/85

PARTIAL DOCUMENT RECORD SHEET

Re. Monthly Report to the GAC - MARCH 1964

Parts of this document were judged irrelevant to the CIC collection effort and were not copied:

Pages I-1 thru I-30 And I-33 thru III-50

Enclosures _____

Attachments _____

Other _____

Title page and table of contents have been copied for reference.

W. Tench
signature

10/9/85
date

DOE ARCHIVES

97